



**BOUCHARD B120 RELEASE
SHORELINE SEGMENT SUMMARY**

5 Lan Drive, Suite 200
Westford, Massachusetts 01886
Tel. (978) 692-1114
Fax (978) 692-1115

GeoInsight Project Number 3871-002

SEGMENT IDENTIFICATION: **W1E-06**

SEGMENT NAME: **Mattapoissett Town Beach**

SEGMENT LOCATION: **Mattapoissett, Massachusetts** (*Map attached*)

MAXIMUM DEGREE OF INITIAL OILING: Moderate (Oiling Score: 3.00)

SEGMENT INSPECTION STATUS: Passed IRAC criteria endpoints on 08/21/2003.

SITE-SPECIFIC INFORMATION

PHYSICAL CHARACTERISTICS:

Primary Shoreline Type/ Geology:

- 1D: Rip rap seawalls, bulkheads, piers, docks, and pilings.

Secondary Shoreline Type/ Geology:

- 1A: Heavily utilized, public recreational sand beaches; and
- 1C: Mixed sand and gravel (pebble to boulder) and rip rap groins (jetties); and
- 1F: Salt marshes.

Hydrogeology:

- Mattapoissett Harbor is located to the south and Buzzards Bay to the south.

Bedrock Geology:

- Bedrock underlying this segment is identified as undivided granite, gneiss, and schist (Zen, 1983).

ENVIRONMENTAL SENSITIVE RECEPTORS (Identified within 500 feet of segment):

Aquifer: None at segment.

Protected Open Space: At segment.

Public Ground Water Supply Wells: None at segment.

Public Surface Water Supply Wells: None at segment.

Areas of Critical Environmental Concern (ACEC): None at segment.

Vernal Pools: None at segment.

Priority Habitats of Rare Species: Adjacent to segment: Buzzards Bay aquatic environment.

Estimated Habitats of Rare Wildlife: Adjacent to segment: Buzzards Bay aquatic environment.

Floodplains: At segment: 100-year floodplain.

HUMAN SENSITIVE RECEPTORS (Identified within 500 feet of segment):

Segment Use: Public beach. Residential dwellings are located within 500 feet of the segment.

The segment is accessible via roadway.

Frequency of Use: Presumably seasonal and year round residential use.

SUMMARY OF INSPECTION ACTIVITIES

WRF INSPECTIONS

(Wildlife Field Reconnaissance- Shoreline or On-Water Observations; Bird Transect Study.)

WRF inspections pertaining to this segment were not conducted.

NRDA FIELD ACTIVITIES SUMMARY

(Natural Resource Damage Assessment)

Note: Includes Shoreline Cleanup Assessment Team (SCAT) inspections and activities. SCAT forms were completed by field inspection teams working under the direction of Unified Command.

DATE	SUMMARY OF INFORMATION RECORDED BY INSPECTION TEAM
05/21/2003	Area of oil (approximately 3 by 150 feet) was observed. Some tarballs observed. Approximately 1% to 10% surface oil distribution observed at the segment.

IRAC INSPECTIONS

(Unified Command Immediate Response Action Completion inspections and activities.)

DATE	SUMMARY OF INFORMATION RECORDED BY INSPECTION TEAM
08/21/2003	Some sporadic splatter observed. Segment met IRAC criteria endpoints.

MCP FIELD ACTIVITIES SUMMARY

(Massachusetts Contingency Plan inspections and activities under the direction of the Licensed Site Professional-of-Record.)

DATE	SUMMARY OF INFORMATION RECORDED BY INSPECTION TEAM
01/20/2004	Phase I characterization activities: Intertidal sediment samples were collected from three sample locations (centered around N41°39.463' W70°48.415', N41°39.491' W70°48.491', and N41°39.484' W70°48.541') in the intertidal zone. At each location, two samples were collected from the upper intertidal zone (W1E06-UIT-01, W1E06-UIT-02, and W1E06-UIT-03) and from the lower intertidal zone (W1E06-LIT-01, W1E06-LIT-02, and W1E06-LIT-03). Each sample consisted of three grab samples collected approximately 30 feet apart and parallel to the shoreline, were composited in a laboratory, and analyzed for EPH fractions and PAH by 8270C/SIM analysis.
09/15/2004	Site reconnaissance: Trace dime-size tacky splatter was observed on top of jetty at N41°39.449' W70°48.386'. On west portion of the segment, one tar patty (approximately 4 inches in diameter) was removed from cobble area in the upper intertidal zone at N41°39.271' W70°49.272'. One cobble with hardened splatter was removed from above the upper intertidal zone at N41°39.405' W70°49.082'.

Notes:

1. GeoInsight did not receive IRA citizen calls pertaining to this segment.
2. EPH = Extractable Petroleum Hydrocarbons.
3. PAH = Polynuclear Aromatic Hydrocarbons.
4. SIM = Selected Ion Monitoring.

TABLE 1
SAMPLE SUMMARY
BUZZARDS BAY, MASSACHUSETTS
SEGMENT: WIE-06
Town Beach, Mattapoisett

Sample ID	Date Collected	Matrix	Analysis	Laboratory	Sampling Program	Sample Location Coordinates		Sample Location Description	Comments
						Latitude	Longitude		
W1E-06-UIT-01	1/20/2004	Sediment	PAH EPH	GAI	MCP-Phase I Site Assessment	N41°39.462'	W70°48.415'	Upper Intertidal Zone	Composite Samples
W1E-06-LIT-01						N41°39.462	W70°48.415'	Lower Intertidal Zone	
W1E-06-UIT-02						N41°39.491'	W70°48.491'	Upper Intertidal Zone	
W1E-06-LIT-02						N41°39.491'	W70°48.491'	Lower Intertidal Zone	
W1E-06-UIT-03						N41°39.484'	W70°48.540'	Upper Intertidal Zone	
W1E-06-LIT-03						N41°39.484'	W70°48.540'	Lower Intertidal Zone	
W1E06-UIT-03-A	1/20/2004	Sediment	PAH EPH	GAI	MCP-Phase I Site Assessment	N41°39.484'	W70°48.540'	Upper Intertidal Zone	Analysis of Archived Aliquots Composite Sample
W1E06-UIT-03-B									
W1E06-UIT-03-C									

NOTES:

1. GAI: Groundwater Analytical, Inc.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
BUZZARDS BAY, MASSACHUSETTS
SEGMENT: WIE-06
Town Beach, Mattapoiet

Analyte	WIE06-UIT-01	WIE06-LIT-01	WIE06-UIT-02	WIE06-LIT-02	WIE06-UIT-03	WIE06-LIT-03	MCP Method 1 Standards			Effects Range-Low Benchmarks Marine Sediments
	Upper Intertidal Sediment	Lower Intertidal Sediment	Upper Intertidal Sediment	Lower Intertidal Sediment	Upper Intertidal Sediment	Lower Intertidal Sediment	S-1 / GW-1	S-1 / GW-2	S-1 / GW-3	ER-L
	1/20/2004	1/20/2004	1/20/2004	1/20/2004	1/20/2004	1/20/2004				
EPH										
C ₉ -C ₁₈ Aliphatic Hydrocarbons	ND(31)	ND(31)	ND(35)	ND(37)	ND(32)	ND(37)	1,000	1,000	1,000	NA
C ₁₉ -C ₃₆ Aliphatic Hydrocarbons	ND(31)	ND(31)	ND(35)	ND(37)	ND(32)	ND(37)	2,500	2,500	2,500	NA
C ₁₁ -C ₂₂ Aromatic Hydrocarbons	ND(31)	ND(31)	ND(35)	ND(37)	ND(32)	ND(37)	200	NA	800	NA
PAH by GC/MS-SIM by method 8270C										
Naphthalene	ND(0.010)	0.006 j	0.007 j	0.007 j	0.010 j	0.007 j	4	40	500	0.160
2-Methylnaphthalene	ND(0.010)	ND(0.010)	ND(0.012)	ND(0.012)	ND(0.011)	ND(0.012)	4	500	500	0.070
Acenaphthylene	ND(0.010)	ND(0.010)	ND(0.012)	ND(0.012)	0.012	ND(0.012)	100	100	100	0.044
Acenaphthene	ND(0.010)	ND(0.010)	ND(0.012)	ND(0.012)	ND(0.011)	ND(0.012)	20	1,000	1,000	0.016
Fluorene	ND(0.010)	ND(0.010)	ND(0.012)	ND(0.012)	0.021	ND(0.012)	400	1,000	1,000	0.019
Phenanthrene	ND(0.010)	0.008 j	0.009 j	0.012	0.280	0.016	700	1,000	100	0.240
Anthracene	ND(0.010)	ND(0.010)	ND(0.012)	ND(0.012)	0.073	ND(0.012)	1,000	1,000	1,000	0.085
Fluoranthene	ND(0.010)	0.009 j	0.018	0.045	0.650	0.055	1,000	1,000	1,000	0.600
Pyrene	ND(0.010)	0.008 j	0.016	0.040	0.490	0.048	1,000	1,000	1,000	0.665
Benzo(a)anthracene	ND(0.010)	ND(0.010)	0.007 j	0.021	0.270	0.025	7	7	7	0.261
Chrysene	ND(0.010)	ND(0.010)	0.010 j	0.025	0.250	0.031	7	7	7	0.384
Benzo(b)fluoranthene	ND(0.010)	ND(0.010)	0.008 j	0.020	0.190	0.027	7	7	7	NA
Benzo(k)fluoranthene	ND(0.010)	ND(0.010)	0.009 j	0.021	0.200	0.028	70	70	70	NA
Benzo(a)pyrene	ND(0.010)	ND(0.010)	0.009 j	0.027	0.240	0.035	2	2	2	0.430
Indeno(1,2,3-c,d)pyrene	ND(0.010)	ND(0.010)	ND(0.012)	0.015	0.120	0.020	7	7	7	NA
Dibenzo(a,h)anthracene	ND(0.010)	ND(0.010)	ND(0.012)	ND(0.012)	0.036	ND(0.012)	0.7	0.7	0.7	0.063
Benzo(g,h,i)perylene	ND(0.010)	ND(0.010)	ND(0.012)	0.015	0.120	0.020	1,000	1,000	1,000	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).
2. EPH: Extractable Petroleum Hydrocarbons.
3. ND(x): Constituent not detected at practical quantitation limits noted in parentheses.
4. PAH by GC/MS-SIM: Polynuclear Aromatic Hydrocarbon analysis by Gas Chromatography/Mass Spectrometry with Selected Ion Monitoring.
5. j: Estimated concentration/ detected below standard laboratory reporting limits.
6. Bold values exceed laboratory PQL.
7. Highlighted values exceed applicable standards.
8. ER-L: Effect Range Low (Long and Morgan 1991).
9. NA: Not Applicable.
10. MCP: Massachusetts Contingency Plan.



W1E-06

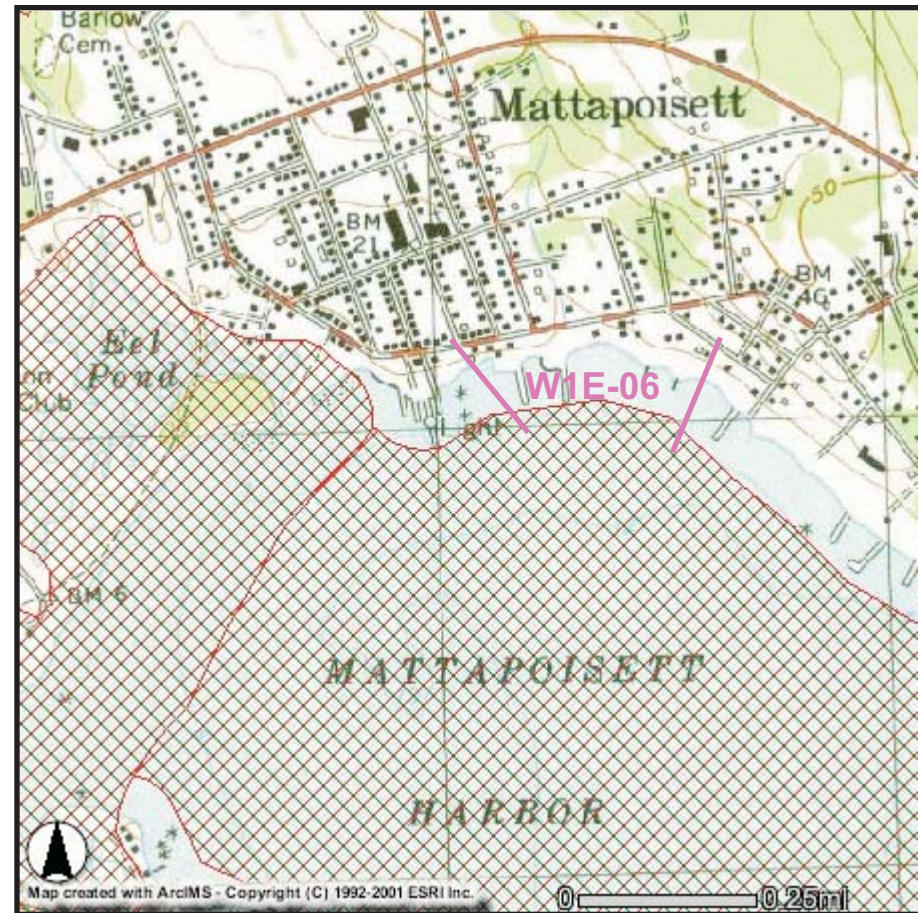
0 125 250 500 Feet



E N T R I X

W1E-06
Mattapoisett Town Beach
Bouchard B No. 120 Oil Spill
Buzzards Bay, MA

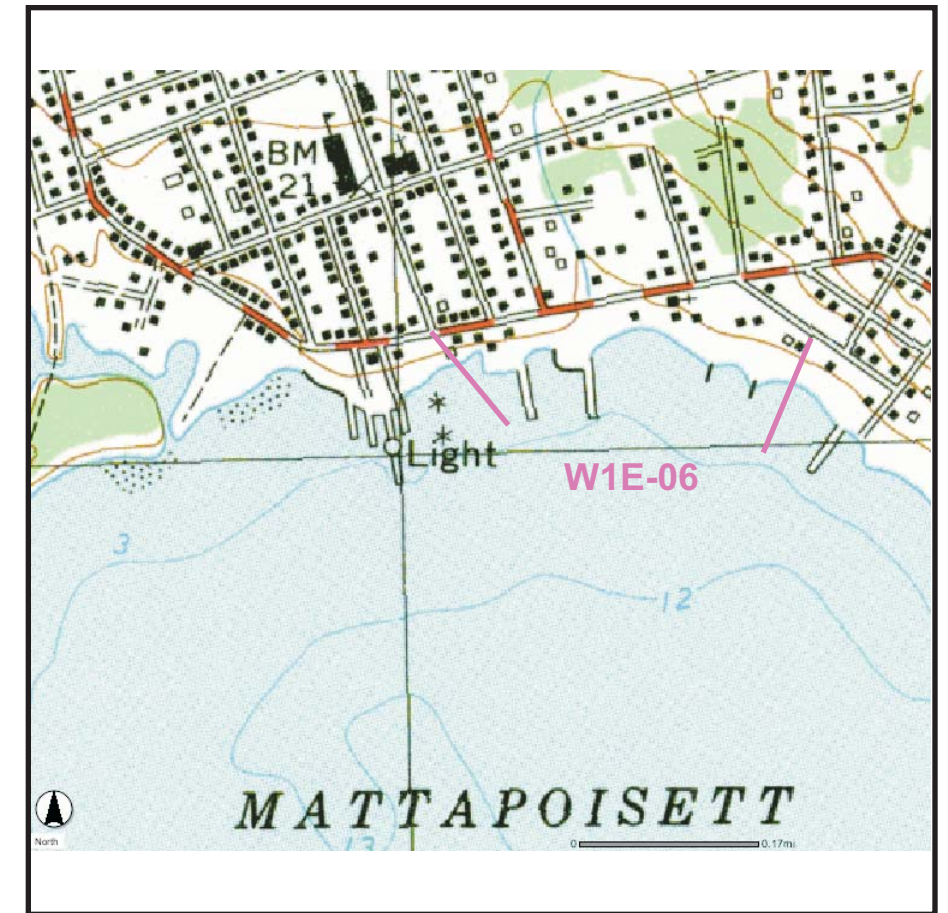
NATURAL HERITAGE AND ENDANGERED SPECIES MAP





21E PRIORITY RESOURCE MAP











































TOPOGRAPHIC MAP




LEGEND

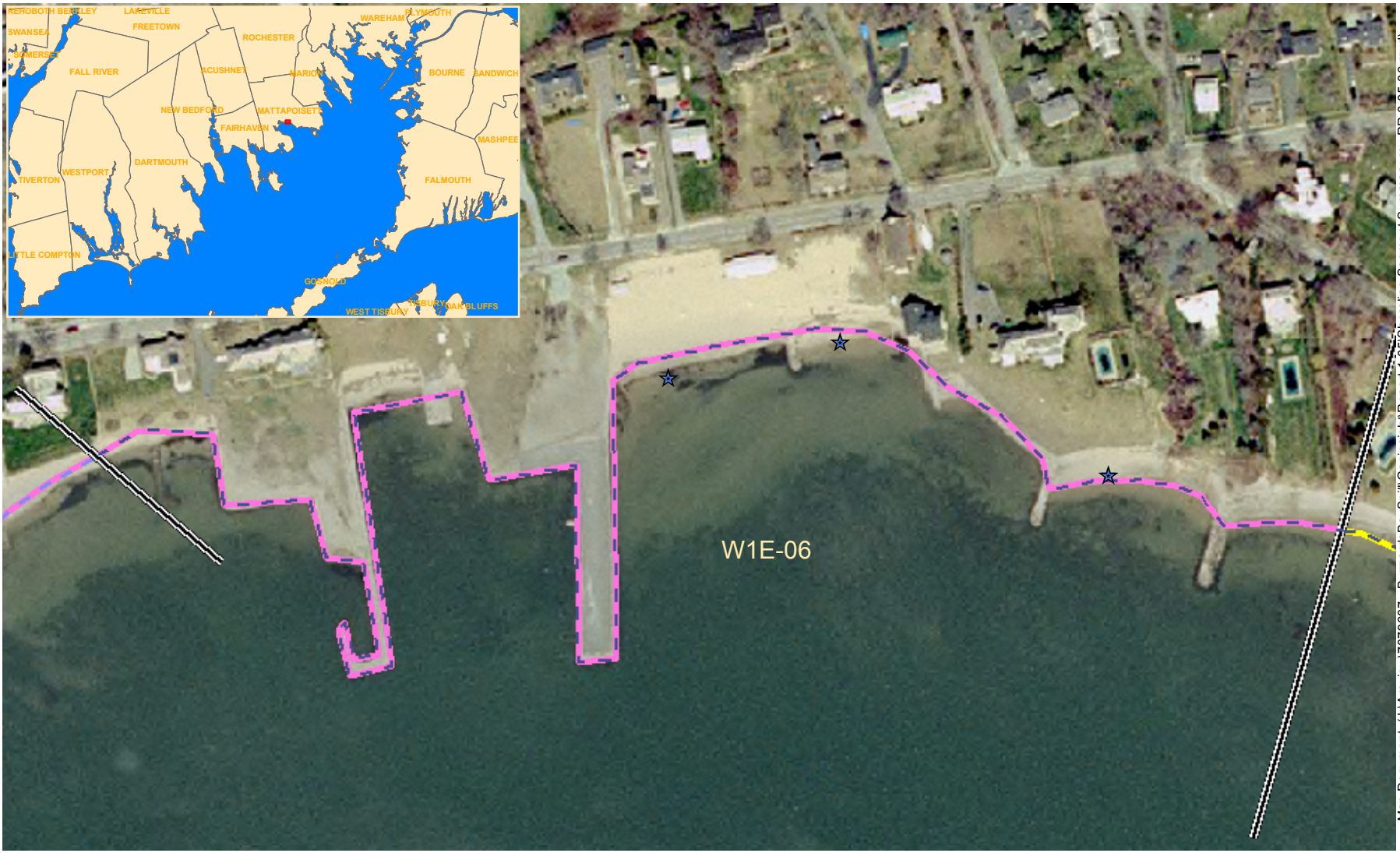
-  NHESP 2005 MA PRIORITY HABITATS FOR STATE-PROTECTED RARE SPECIES
-  NHESP 2005 MA ESTIMATED HABITATS OF RARE WILDLIFE

DEP MCP 21e Map Legend

-  Zone IIs
 -  IWPA's
 -  Zone A
 -  Sole Source Aquifers
 -  Solid Waste Sites
 -  Protected Openspace
 -  ACECs
 -  NHESP Estimated Habitat of Rare Wildlife in Wetland Areas
 -  Certified Vernal Pools 2003 NHESP
 -  Subbasins
 -  Mass Major Basins
 -  DEP Region
 -  Town Arcs
 -  County Boundaries
-  HIGH YIELD
 -  MEDIUM YIELD
 -  HIGH YIELD
 -  MEDIUM YIELD
 -  100 YEAR FLOODPLAIN
-  WATER
 -  RESERVOIR
 -  WETLANDS
 -  SALT WATER WETLANDS
 -  FLATS SHOALS
 -  PERENNIAL
 -  INTERMITTENT
 -  SHORELINE
 -  MAN MADE SHORE
 -  DAM
 -  AQUEDUCT
-  LIMITED ACCESS HIGHWAY
 -  MULTILANE HWY. NOT LIMITED ACCESS
 -  OTHER NUMBERED HWY
 -  MAJOR ROAD - COLLECTOR
 -  MINOR STREET OR ROAD, RAMP
 -  TRACK
 -  TRAIL
 -  PIPELINE
 -  POWERLINE
 -  TRAIN



		PROJECT:		
		B120 OIL SPILL		
TITLE:		LOCATION:		
		MATTAPOISETT TOWN BEACH BUZZARDS BAY, MA		
PHASE II SUPPORTING MAPS				
DESIGNED:	DRAWN:	CHECKED:	APPROVED:	FIGURE #:
LAC	JKB	KDT	MJW	WIE-06
SCALE:	DATE:	FILE:	PROJECT #:	
AS SHOWN	01/25/06	3871WIE-06	3871-002	



Trench Location

- 11/2004
- 10/2004
- 09/2004
- 08/2004
- 07/2004
- 06/2004
- 04/2004
- 03/2004
- 01/2004
- 12/2003
- 11/2003
- 10/2003
- 09/2003

- ✿ Nearshore Subtidal Sediment Sampling Location 2004
- ✿ Deep Subtidal Sediment Sampling Location 2004
- ✿ Subtidal Sediment Sampling Location 2003
- ▲ Qualitative Shellfish Surveys 2004
- ◆ Marsh Sampling Location 2004
- ◆ Marsh Core Sampling Location 2004
- Water Sampling Location 2004
- Water Sampling Location 2003
- ★ Intertidal Sediment Sampling Location 2003
- ★ Intertidal Sediment Sampling Location 2004

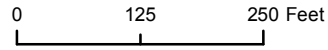
- ★ Shellfish Sampling Location
- ▲ Chain Drag Location 2003
- ▲ Chain Drag Location 2004
- Lobster Pot Sampling Location 2003
- Absorbent Pad Sampling Location 2003
- Dive Sites
- Wetlands
- Nests
- Vernal Pool
- NHESP 2003 Priority Habitats for State-Protected Rare Species

OILING

- NO DATA
- CLEAN
- VERY LIGHT
- LIGHT
- MEDIUM
- HEAVY

IRAC ESI

- Public-Private Sand Beach (1A/1B)
- Mixed Sand and Gravel (1C)
- Marsh (1F)
- Rocky Shoreline (1E)
- Riprap, Groin, Jetty (1D)
- Visual Inspection of Marsh Area



ENTRIX

W1E-06
Mattapoisett Town Beach,
Mattapoisett
Comprehensive Activities
Bouchard B No. 120 Oil Spill
Buzzards Bay, MA